

Reg. No. : .....

**D 2096**

**Q.P. Code : [07 DIT 08]**

(For the candidates admitted from 2007 onwards)

B.Sc. DEGREE EXAMINATION, DECEMBER 2013

MAY 2014

Third Year

Part III — Information Technology

**PRINCIPLES OF DATA COMMUNICATIONS AND NETWORKS**

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

1. Explain the concepts of data communication in detail.
2. Explain the two types of multiplexing methods.
3. Explain the principles of packet switching and routing in packet switching.
4. Explain about functions of seven layers in OSI reference model.

5. Explain the following :
    - (a) ISDN
    - (b) X.25 protocol.
  6. Explain about ARP and RARP in detail.
  7. Discuss in detail on asynchronous transfer mode.
  8. Explain in detail about web browser architecture.
-

Reg. No. : .....

**D 1589**

**Q.P. Code : [07 DIT 09]**

(For the candidates admitted from 2007 onwards)

**B.Sc. DEGREE EXAMINATION, MAY 2014.**

**Third Year**

**Part III — Information technology**

**RELATIONAL DATA BASE MANAGEMENT SYSTEM  
AND ORACLE**

**Time : Three hours**

**Maximum : 100 marks**

**Answer any FIVE questions.**

**All questions carry equal marks.**

**(5 × 20 = 100)**

1. What is meant by Integrity Constraints? What is the need for it? How are they implemented? Explain with examples.
2. Explain the database design with suitable examples.
3. (a) Draw a Schema for a library information system, indicating the primary key, foreign keys/cross references and non-key attributes  
(b) Explain the commands used for transaction processing.

4. (a) Explain any five SQL \*plus commands with examples.
- (b) Consider the following tables and answer the queries:
- Supplier(Sup\_no, Sup\_name, City)
- Part(Part\_no P\_name, Weight, color)
- Project(proj\_no, sup\_no, part\_no, quantity)
- (i) List the suppliers who supply the parts with numbers 101 and 102
- (ii) List the suppliers who supply the parts with numbers 101 or 102
- (iii) List the suppliers who supply any one of the parts supplied by supplier 101
5. (a) Explain:
- (i) nested queries
- (ii) set operations
- (10)
- (b) What is a view? Explain it with example.
6. Explain the control structures in PL/SQL with syntax and examples.
7. (a) What is a function? How will you create it? Explain it with example. How will you use it?
- (b) Explain the term: data dictionary

8. Discuss the following:

- (a) Relation
  - (b) Tuple
  - (c) Candidate key.
  - (d) Domain
  - (e) Truncate.
-

Reg. No. : .....

**D 1590**

**Q.P. Code : [07 DIT 10]**

(For the candidates admitted from 2007 onwards)

B.Sc. DEGREE EXAMINATION, MAY 2014.

Third Year

Part III — Information Technology — Main

**VISUAL PROGRAMMING**

Time : Three hours

Maximum : 75 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. Discuss the significances of Event Driven Programming.
2. Explain the following:
  - (a) Project explorer window
  - (b) Tool box
3. List and explain the various data types used in VB environment.
4. Explain the various Grid controls in Visual Basic.

5. Explain the following :
    - (a) Parts of menu editor
    - (b) Assigning a shortcut key to menu item
  6.
    - (a) Discuss the properties of Image control.
    - (b) Explain the concept of arrays with an example.
  7. Explain the following :
    - (a) Deleting menu items
    - (b) Defining access character.
  8. Elaborate on the process of building ActiveX controls in VB with an example code.
-

Reg. No. : .....

**D 1591**

**Q.P. Code : [07 DIT 11]**

(For the candidates admitted from 2007 onwards)

**B.Sc. DEGREE EXAMINATION, MAY 2014.**

**Third Year**

**Part III — Information Technology**

**WEB TECHNOLOGY**

**Time : Three hours**

**Maximum : 100 marks**

**Answer any FIVE questions.**

**All questions carry equal marks.**

**(5 × 20 = 100)**

1. (a) Explain the functions of various layers of the OSI model.  
(b) Describe the types of bridges. (14 + 6)
2. (a) Elaborate on the functions of TCP/IP.  
(b) Distinguish between UDP and TCP. (14 + 6)
3. (a) Explain any ten HTML Tags and its uses.  
(b) Describe the concept of 'Browsers'. (15 + 5)



4. (a) Discuss the features of e-mail.  
(b) Write a note on e-mail related protocols and e-mail privacy. (12 + 8)
5. (a) Explain the concept of static, dynamic and active web pages.  
(b) Compare Microsoft and java technologies. (6 + 14)
6. Write a note on the following :  
(a) Java servlets  
(b) Java applets. (10 + 10)
7. (a) Describe the feature of XML.  
(b) What is meant by CGI? (14 + 6)
8. Write a note on the following :  
(a) ASP  
(b) ActiveX controls. (10 + 10)
-